M. A. R. 57 (Rule 116) No. E 646058

Measurement Book

Serial No. .....

Bill no: 2nd & final.

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Name of work :- Repairs and improvements to roads and drains & footpath of Tatanagara Main Road in ward no. 08 Kodigehalli						
	A/s No. :- CE(RI)/ADM/AS/166/19-20 Dt:- 23.10.2019						
	T/s No. :- CE(RI)/TS/123/19-20 Dt:- 23.10.2019.						
	AOB No :- 008-20-000036 P-2902 Est. cost :- Rs. 100.00 lakhs.						
	Agreement No: EE/RI-Yuk/Ag/13/19-20, Dt:- 18.12.2019.						
	work order No :- EE/RI-Yuk/WO/13/19-20, Dt:- 18.12.2019.						

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MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Agency :- Executive Engineer -4 KKEDL, BBMP Division, Sri. Shivakumar Swamy Nilaya. No.280, 5th Cross, 17th C Main Road. 3rd 'A' Block, Rajajinagara, Bangalore. Actual Date of Completion Dt:- 22.02.2021.						
	① Removing and refixing stone slabs of dram and pointing in CM (1:3) with all lead & lift and as per direction of engineer in charge.						

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M. A. R. 57 (Rule 116) No. E

Measurement Book

646059

Serial No. .....

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	As per approved qty : 858.33 sqm						
	Previously paid qty vide Item no. ① : 239.25 sqm.						
	pg. no. of MB no. - 372/15-16						
	Present qty vide Item no. ① pg. no. ②					618.92 sqm.	
	of 2nd & final Excel sheet booklet:						
	618.92 sq mt @ Rs. 111=30 per sq mt =						68885=24/-
2)	Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed. The dispersed earth to be levelled						

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MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Nearly after breaking of clods complete as per specification						
	As per approved qty					: 311.40 Cum.	
	Previously paid qty vide Item no. (2) pg. no. of MB 372/15-16					: 96.00 Cum.	
	Present qty vide Item no. (2) pg no. (4) of 2nd and final Excel sheet					: 215.17 Cum.	
	215.17 Cum @ Rs. 214=50/- per Cum = 46154=52/-						
	3) Providing granite slabs of selected quality roughly dressed and fixing in cement mortar (1:6) including fixing curing etc complete with all lead and lift and as per direction of engineer in charge						

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M. A. R. 57 (Rule 116) **No. E**

Measurement Book

646060

Serial No. .....

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	As per approved qty					: 151.475 sqm.	
	Previously paid qty vide Item no. (3) pg no. of MB 372/15-16					: 90.75 sqm.	
	present qty vide Item no. (3) pg. no. (5) pg of 2nd & final encal sheet booklet					: 60.56 sqms	
	60.56 sqmt @ Rs. 742-00 per sqmt					= 44931-81/-	
	4) Providing and laying plain cement concrete of mix 1:3:6 with OPC @ 220 kg with crushed 40mm and down size graded granite metal coarse aggregate @ 0.89 cum and						

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MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Fine aggregate @ 0.46 cum in foundation mechanically mixed, placed in foundation and compacted by vibrator including curing for 14 days including cost of all materials as per approved qty : 7.29 cum.						
	previously paid qty vide Pg.no (4) of MB No. 372/1 - 5.20 cum.						
	Present qty : 0.00						
5)	Providing and constructing granite / trap / basalt rubble masonry in foundation with cement mortar & stone hammered dressed in course not less than 20 cm high,						

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M. A. R. 57 (Rule 116) **No. E**

Measurement Book

646061

Serial No. .....

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	bond stones at 2m, apart in each course including cost of materials, labour, MCM curing complete as per specification						
	As per approved qty					: 19.44 Cum.	
	Previously paid qty vide Pg.no. (5) of MB no. 392/15-16					16.63 Cum.	
	present qty					0.00	
6)	Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240 kgs, with 20mm and down size graded granite metal coarse aggregate @ 0.69 Cum						

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MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	and fine aggregate @ 0.459 cum machine mixed concrete laid in layer not exceeding 15cm, thick well compacted curing including cost of all materials.						
	As per approved qty					4.05 cum.	
	previously paid qty vide M.B. pg. no. 24.00 (6) of MB no. 378/15-16					3.52 cum	
	present qty					0.00	
	7) Providing and laying RCC precast cover slab of 250 mm thick for drain in cement concrete 1:2:4 using graded granite jelly 20mm and down in with steel reinforcement including form work, lift charges, curing and concrete						

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M. A. R. 57 (Rule 116) **No. E**

Measurement Book

646062

Serial No. .....

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	finished surface on both sides etc complete and as per drawing						
	As per approved qty					: 40.50 Sqm.	
	previously paid qty vide Bk. no. 7 pg no. of MB 372/15-16					: 27.72 Sqm.	
	present qty vide Item no (7) pg no. 28 of 2nd & final Excel sheet booklet					: 7.20 Sqmt	
	7.20 Sqmt @ Rs. 3640=00 per Sqmt					= 26208=00/-	
	8) Excavation for roadwork in all type of soil by mechanical means including cutting and loading to tippers, trimming						

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MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	bottom and side slopes in accordance with requirements of lines, grades and cross sections and transportation with a lead of 6.00 km and complete as per specification with all lead & lift						
	As per approved qty					: 842.50 cum.	
	previously paid qty vide Item no. 8 Pg. no.					of MB No. 372/15-16 : 95.90 cum.	
	present paid qty vide Rt. No. (8) Pg. no. (8) of 2nd & final excel sheet					: 745.50 cum.	
	745.50 cum @ Rs 57.03 per cum						42508.00 = 42514.52

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M. A. R. 57 (Rule 116) **No. E**

Measurement Book

646063

erial No. .....

ame of work ..... From ..... To .....

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Date	Full description, etc, of work	Dimensions			Contents	Reference to last Measurement
		Number	Length	Breadth / Depth		
1	2	3	4	5 / 6	7	8
	9) Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by mechanical means attached with scarifier with disturbing the base and hauling the debris including cost of all labour charges					
	As per approved qty				: 1100.50 Sqm.	
	Previously paid qty vide Et. no (9) pg. no. of MB No. 372/15-16				: 1100.31 Sqm.	
	Present qty =				0.00	

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MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	10) Construction of granular sub-base course grading-V of sub-base and drainage layer by providing coarse graded crushed stone aggregate of granite/trap/hard material, mixing by mix in place method by rotavators at OMC spreads in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98% of proctor density complete as per specifications						
	Previously paid qty vide Bt. no. 10 pg. no. of MB no. 372/15-16					236.97 cum.	
	Present qty vide Bt. no. (10) pg no. (11) of 2nd & final Excel sheet booklet					333.50 cum.	
	333.50 cum @ Rs. 1855=00 per cum =						618633=50

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M. A. R. 57 (Rule 116) **No. E**

Measurement Book

646064

Serial No. .....

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	11) Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed material by tipper to site, laying in uniform layer with power sprayer on sub-base / base course and compacting with vibratory roller to achieve the desired density complete as per specifications As per approved estimate					: 826.51 Cum.	

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MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Previously paid qty vide 2t.00. (11) pg.00. of MB no. 372/15.18					343.46 cums	
	Present qty vide 2t.00. (14) pg no. 14 of 2nd & final Excel sheet booklet					482.70 cum.	
	482.70 @ Rs. 2001 = 28 per cum = 966017.85 / 966021 = 11						
12	Providing and applying prime coat with SS bitumen emulsion on prepared surface of granular base such as WBM WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg/sqm using						

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M. A. R. 57 (Rule 116) No. E

Measurement Book

646065

Serial No. .....

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency .....

Date of commencement of work .....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	mechanical means complete as per specification as per approved qty					: 3730.30 Sq mt	
	previously paid qty vide st. no. (12) pg. no. of MB no. 372/15-16					: 1579.79 Sq mt	
	present qty vide st. no. (12) pg. no. 17, of 2nd & final excel sheet booklet					2150.00 Sq mt.	
	2150.00 sq mt @ Rs. 29 = 68/- per sq mt = 63811 = 85/-						
13)	Cleaning the existing bituminous topped surface with brooms						

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MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Rop benches and finishing during with old gunny bags and /or unpressed ash to reveal bituminous treatment including cost of all materials, labour, tools complete as per specification						
	As per approved qty /					3931.10 Sqm.	
	Previously paid qty vide Bk. no. 13 pg no. of MB no. 372/15-16					2557.118 sqm	
	Present qty vide Bk. no. (13) pg. no (18) of and & final Recel sheet					2497.16 sqm. ~~1373.99~~	
	Limited to 1373.99 sqm.						
	1373.99 sq.m @ Rs. 5=30/- per					sq mt = 7282=15	

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M. A. R. 57 (Rule 116) **No. E**

Measurement Book

Serial No. 646066

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
14)	Providing and applying tack coat using 80/100 grade bitumen (VG 10) on the prepared black topped surface at 2.5 kg per 10 sq.m, heating bitumen in boiler fitted with spray set						
	As per approved qty :					8784.40 Sqm	
	previously paid qty vide Item no. 14 of MB no. 372/15-16 pg. no.					4136.90 Sqm.	
	Present qty vide Item no. 14 pg. no. 81						

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MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Of 2nd & final Encad sheet booklet						
						4647.16 sqm	
	4647.16 Sqmt @ Rs. 12.72/- per sqm = 59111.81/-						
15)	Providing & laying dense graded bituminous macadam using crushed aggregate of specified grading premixed with VG 30 grade bituminous binder and transporting the hot mix to work site, laying to the required grade level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specification						

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M. A. R. 57 (Rule 116) **No. E**

Measurement Book

646067

Serial No. .....

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	As per approved qty				:	285.26 cum.	
	Previously paid qty vide Lt. No. 15 Pg. No. of MB. No. 372/15-16				:	157.52 cum	
	Present qty vide Lt. No. 15 Pg No. 24 of 2nd & final Excel Sheet book let				:	127.67 cum	
	127.67 cum @ Rs. 6858 = 20 of per cum = 875557 = 25/-						
16)	Providing and laying bituminous concrete 40mm thick with hot mix plant using crushed aggregate of specified grading, premixed with bitumious binder and filler transporting the						

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MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	hot mix to work like, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory & tandem rollers to achieve the desired compaction in respects complete as per specifications. Clause 507 of MoRTH Revision as per IRC SP-53-2018						
	As per approved qty :					331.63 cum.	
	previously paid qty vide St. no. 16, pg no. of MB no. 372/15-16					165.48 cum.	
	Present qty vide St. no. 16 pg. no. 31 of 2nd & final Excel sheet booklet					165.86 cum.	
	165.86 cum @ Rs. 8049 = 64/- per cum =					1332073=04/-	

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M. A. R. 57 (Rule 116) **No. E**

Measurement Book

646068

Serial No. .....

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	17. Road marking with hot applied thermoplastic compound with reflectorising glass beads on bituminous surface / Concrete surface, providing & laying of hot applied thermoplastic compound 2.5mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC: 35 standard specified.						
	to pass approved abstract					: 306.00 sqm.	
	Previously paid abstract					: 0.00	

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MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Present qty vide Dt. 10.17 Pg. no. 34 2nd & final Excel					304.65 Sqmt	
	304.65 Sqmt @ Rs. 454 = 74/- per sqmt = 138534=27						
18)	Supply and installation of moulded black raised Pavement marker made of poly Carbonate and ABS moulded body and reflective panel with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 16000 kg tested in accordance to specification of category A of Rdtm circular no RW/NH/33023/10-97						

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M. A. R. 57 (Rule 116) **No. E**

Measurement Book

Serial No. 646069

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Do III Dt 11.06.1997. The height width & length shall not exceed 50mm, 100mm & 102mm and with minimum reflective area of 13 sqcm on each side and slope to the base shall be 35 degree. The strength of detachment of the integrated cylindrical shaft:						
	As per approved qty					: 120.00 Nos	
	Previously paid qty					: 0.00	
	Present qty vide Item No. 78						

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MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Page 100. 35 of 2nd & find Excel					120 Nos	
	120 nos @ Rs. 357-22 /per nos					=	42866 = 40
							4335575.00
							4335585 = 65
				+4% KSDL Charges			173423 = 43
				+12% GST Charges			520270 = 28
							5029279 = 36
							5029268.71
	Rupees fifty lakhs twenty nine thousand two hundred seventy nine only						
	26/02/2021						

ME & SE
26/2/21

26/2/21

Assistant Executive Engineer
Road Infrastructure (Yelahanka Division)
Bruhat Bengaluru Mahanagara Palike
Bengaluru - 92.

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M. A. R. 57 (Rule 116) **No. E**

Measurement Book

646070

Serial No. .....

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Certificate :- 1. Certified that the work done is satisfactorily. 2. There is no departmental issues by BBMP. 26/2/2021. Assistant Executive Engineer Road Infrastructure, (Yelahanka Division) Bruhat Bengaluru Mahanagara Palike Bengaluru - 92.				26/2/21		

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MEASUREMENT BOOK

Date	Full description, etc. of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	2nd & Final Bill	9724558-00					
	Previous Pay	4695290-00					
	Present Pay	5029268-00					
	IT 1.5%	67635-00					
	CGST	45090-00					
	SGST	45090-00					
	LWF	45090-00					
	CBF 0.1%	4509-00					
	Royalty	177376-00					
	FSD 5%	251463-00					
	Ads	636253-00					
	By Cheque:	4393015-00					

Audited & Admitted Rs. 5029268-00

Passed for Rs. 4393015-00

Rupees Fourty Three lakh Ninety Three Thousand and fifteen only

4393015-00 by Cheque

636253-00 by Adjustment

AA

Account Superintendent

S.E.(R.I.)

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